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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/821,553	03/29/2001	Robert M. Spotnitz	5512.1	5867

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EXAMINER
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BORISSOV, IGOR N

ART UNIT	PAPER NUMBER
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3629

DATE MAILED: 01/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/821,553

Applicant(s)

SPOTNITZ ET AL.

Examiner

Igor Borissov

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 October 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 and 7-12 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-5 and 7-12 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

Amendment received on 10/18/2004 is acknowledged and entered. Claim 6 has been canceled. Claims 1, 3, 4, 7 and 8 have been amended. Claims 1-5 and 7-12 are currently pending in the application.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-5 and 7-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Notten et al. (US 6,016,047) (Notten).**

**As per claim 1**, Notten teaches a method for a battery simulator, comprising:

providing more than one model of digital circuit, the model adapted to convert at least one customer inputted requirement (input) into at least one output (charge storage device (CSD) design) (C. 1, L. 16-35; C. 10, L. 5-46);

providing an interface for passing inputs to the model, and passing the output from the model (C. 10, L. 5-46);

wherein the customer addresses the interface with the input, the interface directs the input to at least one of the models, the model generates the output that passes through the interface to the customer (C. 10, L. 5-46),

and wherein said at least one customer input includes ambient temperature and battery temperature which is used to model battery temperature not to exceed allowed temperature range of operation (C. 3, L. 20-62).

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Official Notice is taken that it is well known fact that proprietary information/parameters related to the specifics of the software/models are kept confidential from customers (For example, Microsoft Inc. maintains the confidentiality of the Windows © code).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Notten to include that said models are kept confidential from the customer (the interface being adapted to hide the model), because it would advantageously allow the developers of said models to remain competitive on the market, thereby generate more profit.

**As per claim 2**, said method, wherein the model is selected from the group consisting of first principles' models, empirically-based models, and hybrid models consisting of combinations of first principles' models and empirically based models (C. 3, L. 1-11).

**As per claim 3**, said method, wherein said customer input further comprises a plurality of said customer inputs (C. 10, L. 7-11).

**As per claim 4**, said method, wherein the output further comprises a plurality of outputs (CSD designs) (C. 10, L. 5-46).

**As per claim 5**, said method, wherein said model is employed in combination with parameters arranged in a table (database) (C. 3, L. 1-6).

**As per claim 7**, Notten teaches a method for a battery simulator, comprising:  
providing an interface, the interface for customer inputted testing procedure for the charge storage device (C. 25, L. 35-38).

providing a plurality of charge storage device models (C. 1, L. 16-35; C. 10, L. 41-45);

providing the battery management system (a routine) for selecting the best suitable model (C. 10, L. 42-44);

outputting the custom charge storage device design (C. 25, L. 18-35),  
wherein the customer addresses the interface with the inputted requirements (input), the interface directs the input to at least one of the models, the model generates the output that passes through the interface to the customer (C. 10, L. 5-46),

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and wherein said at least one customer input includes ambient temperature and battery temperature which is used to model battery temperature not to exceed allowed temperature range of operation (C. 3, L. 20-62).

Notten does not explicitly addressed confidentiality of said models.

Official Notice is taken that it is well known fact that proprietary information/parameters related to the specifics of the software/models are kept confidential from customers (For example, Microsoft Inc. maintains the confidentiality of the Windows © code).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Notten to include that said models are kept confidential from the customer, because it would allow the developers of said models to remain competitive on the market, thereby generate more profit.

**As per claim 8**, providing an interface, the interface for testing procedure for the charge storage device (C. 25, L. 35-38)

**As per claim 9**, said method, wherein the model further comprises sizing model and a performance program (C. 5, L. 64-65; C. 25, L.35-41; C. 10, L. 25-46).

**As per claim 10**, Notten obviously teaches that the model further comprises an abuse program (C. 25, L. 1-13).

**As per claim 11**, Notten obviously teaches that executing a simulation further comprises the step of optimizing the simulation (C. 6, L. 58-59; C. 10, L. 35-37; C. 25, L. 35-39).

**As per claim 12**, Notten obviously teaches that outputting the custom charge storage device design further comprises the step of reporting the design (C. 1, L. 16-35; C. 10, L. 5-46).

#### ***Examiner's Note***

A "traverse" is a denial of an opposing party's allegations of fact. The Examiner respectfully submits that applicants' arguments and comments do not appear to traverse what Examiner regards as knowledge that would have been generally available to one of ordinary skill in the art at the time the invention was made. Even if one were to interpret applicants' arguments and comments

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as constituting a traverse, applicants' arguments and comments do not appear to constitute an adequate traverse because applicant has not specifically pointed out the supposed errors in the examiner's action, which would include stating why the noticed fact is not considered to be common knowledge or well-known in the art. 27 CFR 1.104(d)(2), MPEP 707.07(a). An adequate traverse must contain adequate information or argument to create on its face a reasonable doubt regarding the circumstances justifying Examiner's notice of what is well known to one of ordinary skill in the art. In re Boon, 439 F.2d 724, 728, 169 USPQ 231, 234 (CCPA1971).

If applicant does not seasonably traverse the well known statement during examination, then the object of the well known statement is taken to be admitted prior art. In re Chevenard, 139 F.2d 71, 60 USPQ 239 (CCPA 1943).

### ***Response to Arguments***

Applicant's arguments filed 10/18/2004 have been fully considered but they are not persuasive.

In response to the applicant's argument that Notten fails to disclose *outputting a CSD design*, it is noted that Notten explicitly teaches the use of simulating tools for developing *new batteries* based on the input parameters (C. 25, L. 18-20), wherein the input parameters can be adjusted, and wherein for each set of input parameters it is checked whether a resulted *battery design* is based on the selected *design* input parameters (C. 25. L. 35-38).

In response to the applicant's argument that Notten fails to disclose the customer inputted requirements, including *temperature range of operation*, Examiner points out that Notten explicitly teach importance of *allowed temperature range* for desired battery design. Knowing said temperature range, Notten's system allows to model the

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temperature behavior of the battery (employing input parameters representing the battery temperature and the ambient temperature) not to exceed said allowed temperature range (C. 3, L. 20-25, 27-30, 38-39, 54-62).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication should be directed to Igor Borissov at telephone number (703) 305-4649.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist whose telephone number is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John Weiss, can be reached at (703) 308- 2702.

Any response to this action should be mailed to:

***Commissioner of Patents and Trademarks***

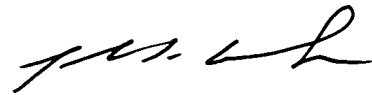
***Washington D.C. 20231***

or faxed to:

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**(703) 872-9306** [Official communications; including After Final  
communications labeled "Box AF"]

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal  
Drive, Arlington, VA, 7<sup>th</sup> floor receptionist.



JOHN G. WEISS  
SUPERVISORY PATENT EXAMINER  
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01/05/2005